

# ILLINOIS ENGINEER

PROFESSIONAL ENGINEER!

Prospective Member - See Page 6



SYMPHONY IN STEEL (See page 2)





NOVEMBER, 1953-VOLUME XXIX, NO. 11

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# Of Professional Interest

#### THANKSGIVING

It is a good thing to give thanks unto the Lord. Psalm 92:1

#### THE ILLINOIS ENGINEER—THIS MONTH

To A Prospective Member of I. S. P. E. - N. S. P. E.

An application for membership in the Illinois Society of Professional Engineers which is synonymous with membership in the National Society of Professional Engineers means that you have indicated your desire to identify yourself with the engineering profession. The true professional attitude must include such a membership since the I.S.P.E.-N.S.P.E. is the one overall society embracing all branches of engineering and standing for the social and economic advancement of the profession.

This thought that the professional attitude involves a desire to improve the position of one's profession in society has been very beautifully expressed by Sir Francis Bacon as follows, "I hold every man a debtor to his profession; from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves by way of amends to be a help and ornament thereunto."

If you are a professional engineer the Society will welcome you into its membership.

W. A. OLIVER, Editor.

#### "SKEETS" HOSPITALIZED

(Prepared by W. J. ROBERTS, Champaign County Chapter)

If we had reported on the health of our Executive Secretary a week ago our remarks would not have been too optimistic. But as of press time the news is better. Skeets woke up Monday, October 19, with considerable pain in his chest. His doctor moved him later that day to the Burnham Hospital for tests and x-rays. Actually, the doctors who have examined him have made no diagnosis. The chest pain subsided after three days of bed rest. A week later, when he was allowed out of bed, he had distress in the stomach area. Another round of tests was ordered.

His spirits are high and our guess is that whatever is bothering him will be taken care of before another issue of the Engineer appears.

#### COST OF LIVING INDEX

The correction factor to be applied to the I.S.P.E. Schedule of Minimum Fees and Salaries was 192.3 for August, 1953. The factor is based upon the U.S. Department of Labor's most recent Consumer Price Index.

The expectations of life depend upon diligence; the mechanic that would perfect his work must first sharpen -Confucius his tools.

#### PRESIDENT'S MESSAGE

TO YOU, ENGINEER FRIEND—this issue of the ILLINOIS ENGINEER is dedicated.

We would like to acquaint you with our Professional Society. We are proud of its accomplishments. Through the co-ordinated three-level organization-Local, State and National—the membership expresses itself with a single powerful voice representing over 30,000 Professional Engineers. Among the myriad of activities are such matters as legislation, national defense, public relations, ethics, education, improvement of registration laws, young engineers' problems, unification of the profession, public service projects, employment practices and economic problems of the day.

The accelerating growth of N. S. P. E. reflects the continuing awareness of the Profession to its responsibility and opportunities for service in the field of industrial, public and professional progress.

Of particular significance in the public service field are the Executive Research Surveys which are at present being conducted by N.S.P.E. Those surveys are being well received, and are being further exploited, by industry in the field of Public Relations. Through the surveys, the National Society has brought to the attention of industry, influential individuals and organizations, the public service concepts of the Profession. In addition to direct distribution of the reports, great value was received from editorial comments and articles appearing in leading newspapers and magazines, including such well-known publications as Business Week, Engineering News-Record, Iron Age, New York Times, Railway Age, Chemical Week, and Modern Industry.

N. S. P. E. made the survey to determine the attitude of industrial firms toward engineers. The responses indicate that industry appreciates the vital role that N. S. P. E. has taken in the field of public relations in modern industrial life. A great number of industries have since requested copies of the reports to distribute

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to their personnel and are carrying out the recommendations contained therein.

The reports reveal that, through the concepts of the Profession, the Professional Engineer has the opportunity to advance his company's recognition, increase his own stature, and build better relations between industry and the general public.

Unless the Professional Engineers unite like the medical and legal professions, engineering may become the victim of union organizers. Engineers, by the very nature of their work, must operate on a basis of individual merit. Certainly, there is nothing in the union theory that recognizes individual merit or gain in professional stature. The activities of bargaining groups for engineers can no longer be considered lightly by professionally-minded engineers. The recent organization of the so-called brainiest bargaining union in America, known as "Engineers and Scientists of America" (ESA), is of deep concern to the Profession and the public welfare. Such is the organization that discusses their college degrees as union plumbers do apprentice training.

It is a time for decision!! The Engineering Profession can seize the initiative and PROGRESS—or sit back and lose another 50 years. Your membership is an opportunity for service to the well-being of "YOUR PROFESSION."

RAYMOND G. BRICHLER President, I.S.P.E.

#### COVER PICTURE

The picture on this month's cover shows a chip of AISI (American Iron and Steel Institute) 4150 (modified) steel turned dry without a carbide tool at a cutting speed of 176 feet per minute (surface), and a feed of 0.0198 inches per revolution. The depth of cut was 0.25 inches. The interesting pattern is as it came from the lathe, and the dramatic lighting (single side light) contributes to the over-all composition.

The picture was made by C. Dale Greffe, and it has received some little success as a salon print in the international photographic salons in recent months. Professor Greffe is President of the Champaign County Chapter and has had many of his photographs hung in national and international exhibitions.

#### ROCK RIVER CHAPTER VISITS STEEL MILL

(Prepared by L. F. Holstein)

Seventy members and friends of the Rock River Chapter, Illinois Society of Professional Engineers, were guests of the Northwestern Steel and Wire Company, Sterling, on an inspection trip of the company's Avenue "G" Plant on Monday evening, October 19th.

At a dinner in the Miami Lounge, sponsored by the Society, Mr. Charles A. Farnham, Vice-President of Industrial Relations, briefly reviewed the history of the company since its establishment in 1879 as a manufacturer of barbed wire. Mr. R. F. Davis, Chief Engineer, gave a short description of the various mills and elec-

trical equipment in the plant, following Mr. Farnham's talk, after which the group was conducted to the Public Service Company Substation providing electrical energy for the mill operations.

Proceeding to the steel mill, the group viewed the pouring operation from the electric furnace to the seventon ingots and their progress through the reheat furnace to the 46-inch blooming mill. The blooming mill reduced the ingot to a "bloom" approximately six inches square which was further reduced in the billet mill to billets  $2\frac{5}{16}$  inches square by 30 feet long. These billets may then be further processed into rods and thence to wire for use in the wire mill portion of the plant or proceed through the merchant bar mill for processing into rods, bars or angle iron for commercial use.

Although it was impossible in the time allotted to completely view all the plant operations, the magnitude and complexity of the steel processing was very firmly impressed. Considering that ground was broken for the plant on March 1, 1950, the Northwestern Steel and Wire Company has progressed rapidly in supplying a large portion of the nation's steel demand.

## REFRESHER COURSE FOR STRUCTURAL ENGINEERS

The Madison County Chapter and the St. Clair Chapter of the Illinois Society of Professional Engineers are making arrangements with the Division of University Extension of the University of Illinois to hold a twelve session, one night weekly, non-credit refresher course for structural engineers.

Sessions will be held weekly on Tuesday nights at 7:30 p. m. at the East St. Louis High School. Registration for the class will be held at the first meeting of the class which will be on Tuesday, November 3, 1953. Fee for the course is \$15.00.

The course is designed primarily for persons who wish to take the State examination for registration as a Licensed Structural Engineer. The course reviews structural design theory. Emphasis is placed on the practice of structural design of both structures and foundations. A review of stress determination is followed by work in design in steel, concrete and timber. Practical examples are used to illustrate the design of buildings, trusses and foundations.

An invitation is extended to all engineers interested in taking the refresher course. Mr. G. H. Shanahan, 930 Henry Street, Alton, Illinois; Mr. Fred Moore, 29 Farthing Lane, Belleville, Illinois, or Mr. Fred Steurnagel, U. of I. Extension Specialist of 1321 Pennsylvania, East St. Louis, Illinois may be contacted for additional information.

Refresher courses for Professional Engineers and for Land Surveyor are being arranged for later dates.

All that time is lost which might be better employed.

# St. Clair Chapter Ladies Auxiliary - A History



ST. CLAIR LADIES' AUXILIARY CHARTER CEREMONY

Standing, left to right-President Brichler, Mrs. F. G. Olbrich, Mrs. G. W. Kennedy, Executive Secretary P. E. Roberts. Seated-Mrs. D. J. Johnston, Mrs. R. G. Brichler.

#### (Prepared by Mrs. D. H. MURPHY)

In her wanderings with her then-delegate husband. Mrs. Raymond G. Brichler of Belleville would attend the ladies' sessions while her husband was attending the business meetings of the Illinois Society of Professional Engineers. In the course of her travels she learned that Auxiliary groups could be formed, how they were formed . . . and that in Illinois the Decatur group had formed an Auxiliary.

Each time groups of Engineers' wives would meet at any function they would always enjoy the time they had spent together and would express regret at having to leave without more visiting. Gradually "We ought to get together more often" was the current expression to be heard. Knowing that Mrs. Brichler had traveled to and sat in on many I. S. P. E. affairs, the ladies began talking to her about forming an auxiliary group. They also talked to their husbands and, subsequently, during the presidency of Mr. Fred J. Meek and with the able

assistance of Mrs. Meek, they were invited to form an auxiliary to the St. Clair County Chapter of the I. S. P. E.

Three dozen telephone calls later twenty-six ladies were in attendance at the pre-organizational meeting held on Friday, November 21, 1952, at the Dutch Girl in Belleville. The group voted to become an auxiliary. Membership was open to the wife of any professional engineer eligible to belong to the ISPE. It was decided to meet in January on the same evening as, but separate from, the ISPE to discuss and pass on the constitution and by-laws.

The January meeting was held in February (the 12th, to be exact) at Jeanie's Tea Room in East St. Louis. Mrs. David Johnston, who headed the committee on constitution and by-laws, presented the constitution to the ladies who voted for its adoption. Serving with her on this committee were Mrs. Charles Manion, Mrs. Ralph Bartelsmeyer, Mrs. Manuel Garcia, Mrs. J. C. Widener and Mrs. Stephen Casteel. A mominating committee consisting of Mrs. William S. Krause, Mrs. Harold Watson and Mrs. Earl Markwardt proposed as officers Mrs. Raymond G. Brichler, president; Mrs. David Johnston, vice-president; Mrs. F. G. Olbrich, secretary; and Mrs. G. W. Kennedy, treasurer. They were elected by acclamation. Also elected as members of the board of directors were Mrs. Ralph R. Hodges, Mrs. Loren "Mike" Krause, and Mrs. Stephen Casteel. Committees appointed by the new president were as follows:

Program—Mrs. William S. Krause, chairman, Mrs. Fred R. Friedewald, Mrs. Charles Manion, Mrs. Ralph Bartelsmeyer, Mrs. Earl W. Markwardt. Membership—Mrs. J. C. Widener, chairman, Mrs. Melvin Dobbs, Mrs. Harold L. Watson. Social—Mrs. Arthur J. Feickert, chairman, Mrs. Stephen Casteel, Mrs. O. M. Andres. Telephone—Mrs. Ernest Hardwig, chairman, Mrs. Charles Manion, Mrs. Robert C. Voellinger, Mrs. F. R. Friedewald, Mrs. William S. Krause. Publicity—Mrs. Devereux H. Murphy, chairman, Mrs. Loren "Mike" Krause.

The auxiliary was formed to promote friendships among the families of Professinoal Engineers and to further in any way possible the aims of the Illinois Society of Professional Engineers.

On Saturday, May 9th, the Ladies' Auxiliary to the I.S. P. E. held its spring meeting at the Elks' Club. The affair was a banquet held to sign the charter received from the state organization. Guests were husbands of the members and several state officers of the Illinois Society. Mrs. Raymond G. Brichler, president of the local group, presented to the assembly the officers and their husbands: Mr. Arthur J. Feickert of Belleville, president of the St. Clair County Chapter of the I. S. P. E., and Mr. Manuel Garcia of East St. Louis, Secretary of the St. Clair Chapter. She also presented Mr. Raymond G. Brichler, State President of the I. S. P. E. and also her husband, and Mr. P. E. Roberts, Executive Secretary of the I.S.P.E. Mrs. William S. Krause, program chairman, was in charge of the affair. After the signing of the charter the evening was spent in dancing.

And that is the story of how the girls went to work and formed their group. It is a little early to evaluate the move, but already we are looking forward to each meeting, already we feel a little "closer" to each other, and we hope in the fall to put on a membership drive that will not only increase our ranks, but also those of the parent group as well.

# Expansion of NSPE'S Programs Made Possible By Dues Increase

T. CARR FORREST, JR., President NSPE

As a member of the N.S.P.E. Board of Directors for the past seven years, serving for the past two years as chairman of its Budget Committee, as well as a member of its Executive Committee, I have had the unpleasant task at various times to remind the Board that some contemplated programs could not be fully implemented because of financial limitations of the Society. Now as President I am unfortunately faced with the same problems, but I am also considerably heartened by the prospects for the future. After very careful consideration and extensive debate at the state and chapter levels, when the Board of Directors of N. S. P. E. decided to increase the dues effective January 1, 1954, it made possible the continued aggressive programs of the Society, as well as providing for better service to its membership and the engineering profession.

I am sure each reader has studied very carefully the material prepared by committees of NSPE on the financial situation faced by the Society and released in special reports to the state societies in the American Engineer. I need not reiterate the various factors which made it imperative that a dues adjustment be made if the Society was to continue to exert its leadership in professional programs. All members, I know, are aware

that the costs of all things for which the Society's money is used have increased considerably over the past several years. Detailed analyses of these items, ranging from postage to rent, were outlined in some of the reports presented in the initial considerations of this important problem.

A portion of the dues increase, therefore, will be needed to maintain normal operations on an even higher level of service to the membership. In addition, of course, we have a much-expanded program as well as an increased membership. Both of these items step up the activities which, in turn, make demands on our limited finances.

I shall not attempt in this first report to do other than review some of the programs your National Society expects to pursue aggressively in 1954. While the administration of the Society and its committees are diligently studying procedures by which the various programs will be implemented, it is too early as yet to be able to report the specific details or the budget allocations which will be possible. The Board, at its forthcoming meeting in November, will give the final review to the various plans being developed by the committee chairmen. I hope to be able at a later reporting to give you a breakdown of some of the major programs and their costs so that

you may have a better picture of just how your dues dollar will be spent.

There are, of course, certain programs which definitely will be developed and implemented in 1954. One of the major projects in which our entire membership is interested is the continuation of our public relations activities. These activities not only will be continued, but it is hoped that the program will be expanded to cover some of the objectives which it has been impossible to accomplish in the past. On the broad front of information to the public, the principal effort will be concentrated, as in the past, on National Engineers' Week. However, it is hoped that a year-'round program of newsworthy information can be developed on the basis of national releases for public consumption and information supplied to state societies and chapters through which they, too, can develop stories of interest on the local level.

A major emphasis, of course, will be placed on a continuation of the Executive Research Survey series of the Professional Engineers Conference Board for Industry. It will be recalled that this program is directed specifically to the users of engineering services in an attempt to acquaint them with the professional status of their engineers and the valuable services they represent.

It is hoped, too, that our public relations activity can be expanded to be of more general assistance to states and chapters through the development of such things as assistance with respect to chapter programs, timely reports on activities which will be helpful to chapter and state public relations planning, and more extensive reporting to the membership on all activities of the Society.

While we have had excellent government liaison in the past, there have been many fields in which it has been just impossible for us to carry the contacts and representation desirable. With the general expansion of the Society's programs, it is expected that we may improve this phase of our national activity and become even more diligent in both our legislative and our governmental representation. Closer work with Congressional committees and personnel, as well as with federal agencies, will be possible.

Our committees in a number of other fields are actively studying surveys and reports which will be of considerable assistance to state societies as well as other units of the engineering profession. For example, in the educational field more extensive cooperation with our nation's educators, surveys of some of the professional aspects of engineering education, and other similar matters are being studied.

In the field of engineers in industry, a recently-appointed committee is studying ways and means by which the professional society can be of some assistance to this large group of our profession.

Another committee, concerned primarily with the engineers between college graduation and the attainment of full professional status, is studying ways and means

of attaining closer coordination of this group with the professional society as well as improving the service which the professional society can render to it.

The big question of collective bargaining is the subject of extensive study by several of our committees. This threat to professional development is one which must be met with timely and effective professional action with which all elements of the professional society should be concerned. It is confidently expected that the 1954 program will include a large degree of activity in this field.

N. S. P. E.'s growth over the past few years has been most encouraging. However, I am sure that for many of us there has been a desire that the growth be even greater. It is somewhat disheartening to me as I get about the country to find that there are many professional engineers who do not know of N. S. P. E. as well as many who do know of it but have quite an erroneous impression of its objectives and its programs. This, of course, can be corrected only through an aggressive membership campaign and the development of materials to assist our state societies and local chapters in acquainting non-members with the programs and activities of the Society. This is another important goal toward which 1954's program will be directed.

A third Board meeting which has not been possible in the past is contemplated for 1954—a spring meeting in Albuquerque, New Mexico. In addition, of course, there also will be the Annual Meeting in June in Milwaukee, Wisconsin, and the fall meeting in Omaha, Nebraska.

Of course, one of our most pressing problems is that all of these expanded activities cannot be carried with our limited headquarters facilities and staff. Your administration, therefore, is now concerned with providing more adequate headquarters facilities. A proposal in this direction will be considered by the Board of Directors at the fall meeting.

In addition, the Society has not been able in the past with its limited finances to accumulate the substantial reserve which a good business should have. Thus, it is hoped that out of the 1954 budget there can be provided an annual increment to a reserve which, in a period of time, will build up a satisfactory financial backlog for Society operations.

I hope to be able, in a succeeding comment on the 1954 N. S. P. E. programs, to give you more details. It will be impossible, however, to give you full particulars on many of them until sometime in 1954.

In our democratic form of Society administration, there are many steps in the planning of a program. While programs originate in broad form in a committee or from the membership itself, funds must be provided under the budget, and the whole program approved by the Board. It is only then that a committee can begin to work on specific plans. But I am determined as the year progresses to keep the membership as fully informed as possible regarding the various phases of each program.

## To The Prospective Member

The purpose of this issue of the Illinois Engineers is to bring before prospective members the aims and purposes of the Illinois Society of Professional Engineers and of the National Society of Professional Engineers of which it is an affiliate. The following series of articles has been prepared by a partial list of officers and committee chairmen of the Illinois Society to explain the function of their particular activity. Note that these statements tell a purpose only, without any reference to accomplishment. Let it be understood at this point that the Society is proud of its accomplishments which have increased at an accelerated rate during the years.

But in order to speak with a stronger voice for the engineering profession which is its prime purpose, the Society needs a larger membership. That is the reason this issue of the Society's magazine has been placed in your hands. That is the reason that your attention is directed to the fold-in application for membership on the facing page and that your consideration of such membership is respectfully requested.

W. A. Oliver, Editor

#### PLEASE NOTE:

It is requested that the recipient of this magazine pass it on to an engineer friend after it has been read.

#### THE SOCIETY-WHAT IT IS

ROB Roy, Chairman, Public Relations and Publicity Committee

The Illinois Society of Professional Engineers is an organization which includes duly qualified engineers of all branches of the profession.

Because there are many branches, it is obvious that to avoid any possibility of friction or discontent, extreme caution must be used not to allow one of the branches to have so much authority as to exclude any of the others. It is much to the credit of the Illinois Society, in its sixty-seven years of activity, that no single branch of the profession has dictated the policies of the organization. This same principle has been applied to the sixteen chapters, located throughout the state. The civil, electrical, mechanical, chemical, agricultural and all other branches of engineering are looked upon as being on the same level and strictly in conformity with the name, Illinois Society of Professional Engineers.

With more than 14,000 licensed professional engineers in the State of Illinois, a large per cent of the number have not availed themselves of the opportunity of becoming affiliated with the organization which, in the past, has been and undoubtedly will continue to be, one of the strongest groups representative of the professional engineers. The question of how to interest these unaffiliated professional engineers is still one of a "\$64.00 rating."

The secret of selling anything is to have something worth while to offer, and, what is more worth while than a membership in an organization, the first objective of which is, "The promotion and welfare of the engineer"?

The Illinois Society's affiliation with the National Society of Professional Engineers has done much to fulfill the above referred to objective. With state societies established, or in process of establishment in every state in the Union, and each of the state societies having chapters such as the Illinois Society has, it is certain the organized professional engineers are well on their way to raising the standards of their profession.

Two magazines, the American Engineer of the National Society and the Illinois Engineer of the Illinois Society are recognized mediums of information to the engineers. Both of these periodicals are included in the combined annual dues of \$20.00. To the young engineer commencing in the profession of his choosing, and to the practicing engineer whose livelihood depends upon his ability and skill, these publications are of undeniable value. The same is true of a membership in the organization.

## STATE ENGINEERING EMPLOYEES COMMITTEE

WILLARD O. MOORE

This committee is the liaison committee between the Illinois Society of Professional Engineers and The Illinois Association of Highway Engineers. The purpose is to evaluate any complaints that reach the committee and suggest courses of action to be taken by the Illinois Society to assist in obtaining objectives desired by the State Engineering Employees.

Normally the Highway Engineers are able to obtain these objectives by use of their own organization. Should additional help be necessary this committee is then ready to make a study and suggest to the officers of the Illinois Society of Professional Engineers what action is desirable.

In recent times no action has been required of this committee. Its principal source of information is from the various chapter presidents and chapter representatives who are in close touch with the situation affecting the welfare of State Engineering Employees.

#### RESOLUTIONS COMMITTEE

J. H. Morgan, Chairman

The Resolutions Committee is charged with the function of preparing a resolution on any subject assigned to it by the Board. However, it is mostly an amenities committee. During a year, from twelve to fifteen members pass on. The committee collects short biographies and prepares resolutions of condolence to present to the Society for passage and delivery to the next of kin. It prepares resolutions of appreciation and thanks for the

#### YOUR PART IN THE MEMBERSHIP DRIVE

- 1. Fill out the card with the three names to whom this, the December and January Illinois Engineer will be sent and drop in the mail.
- 2. Paste a label containing your first prospect's name and address over your name and address on the front cover.
- 3. Put on a three-cent stamp and drop in the mail.

NOTE: If you are saving a file of copies of the Illinois Engineer, send request to the Executive Secretary's office and each of your three copies will be replaced. The important thing is to get this copy into the hands of a prospective member without delay. Thanks for your help.

hospitality of chapters and committees which foster and guide the Society's annual convention.

The Resolutions Committee may prepare resolutions for presentation to the Society for passage which a majority of the committee desire to present. However, all its resolutions must be sent to the Board to be acted upon before going before the membership. The Board approves or disapproves or submits the resolutions without comment to the membership. Whether or not the Board approves, the resolution goes before the membership, but it is a very rare event that a resolution, disapproved by the Board, is accepted by the membership.

#### INTER-SOCIETY RELATIONS COMMITTEE

GEORGE E. EKBLAW, Chairman

Because this committee is new, having been instituted by President Brichler this year, in all its aspects—duties, objectives, composition, personnel, operation—it is in a formulative stage, and for that reason whatever may be said about it must be an attempt solely to foresee its future without the benefit of a background of experience acquired during previous existence.

However, one aspect should be clarified at the outset—the committee is concerned with the relation between our Society and other societies in the engineering profession, not with other professions. Our National Society has both an Inter-Society Relations Committee and an Inter-professional Relations Committee, the latter being concerned with other professions. Our State Society is engaged in this field only through the Committee on Cooperation with Architects.

The fundamental purpose of the committee is to serve as the centralizing agency for all the efforts of our Society and its members to promote better relations among engineering societies in accordance with our desire to engender greater solidarity and to cultivate unity in the profession. It is charged specifically with the following duties:

"To promote unity of the entire profession shall be the foremost endeavor of this committee. It is desirable that the committee invite members of technical societies to join with the Illinois and National Societies of Professional Engineers and to promote contact and acquaint them with advantages of membership and to encourage registration."

As prescribed in By-Law 13 of the National Society the duties of the National Committee, with which our committee presumably will cooperate to coordinate activities in Illinois, provide a broader expression of our potential activities:

- 1. To serve the officers and the Board in an advisory capacity regarding matters affecting relations of the National Society with other organizations.
- 2. To initiate advice and recommendations as well as to consider and report upon matters referred to it by the officers and the Board.
- 3. To develop for dissemination among engineering societies information regarding the objectives of the National Society and the means proposed by the National Society for their attainment.
- 4. To assemble and correlate the viewpoints of the several branches of the engineering profession to the end that the National Society may more accurately reflect the viewpoint of the profession as a whole.
- 5. To develop a program and policy for effecting constructive cooperation and better understanding between the National Society and other engineering or other professional organizations in matters of mutual interest and concern.
- 6. To promote understanding by the members of the National Society of the problem involved in intersociety relations.

Our committee has been formed with only a few members, with the idea that it should be enlarged. It has been suggested (1) that on the committee there should be at least one representative from each of the technical societies in Illinois, provided there are such representatives in our Society, and (2) that there should be on the committee one representative of each chapter, who would serve as the local chairman of the intersociety activities in this chapter area. These two suggestions are not at all antithetical. Whatever the final composition of the committee may be, every member of the Society is actually a member of the committee, in the same manner as he is a member of the membership, advertising, legislative analyzing, and similar universal committees of our Society.

Just how our committee shall function and operate is uncertain and must be developed. The National Committee seems to be in the same situation. Quoting from its report at the annual meeting last June:

"The initial activity of the Inter-Society Relations Committee this year consisted of an exchange of ideas by correspondence between the Chairman and President Coleman and the members of the Committee for carrying out the objectives of the Committee, as outlined in the N. S. P. E. By-Laws.

"Most of the members of the Committee are officers

or directors in various technical societies and it was understood that each member would endeavor to promote good relations between N. S. P. E. and his own technical society. However, the Committee recognized that the members of this one committee of the National Society could not alone do this important job, but that it could be done much more adequately by having active Inter-Society Relations Committees in each state society at both state and local levels.

"Joint meetings with other engineering societies are excellent for developing and maintaining good relations with other societies and we are pleased to find that an increasing amount of this kind of activity is being carried on by the state societies. Although "Engineers Week" is not a specific function of the Inter-Society Relations Committee, it appears that most state societies believe it is very helpful in promoting good relations between our professional societies and the other engineering societies."

Joint meetings with local sections of the technical societies and joint efforts in overall engineering activities which some of our chapters have sponsored have already proved their worth, and more should be fostered. Opportunities for advocating unity should be seized on every occasion. It is to be presumed that every member of the Society will do this individually, whenever and wherever the opportunity presents itself, but possibly the committee can do something towards creating more such opportunities.

The assistance of every member of the Society is solicited and suggestions and counsel will be welcomed, that the goal of unity may be more quickly attained.

#### REGISTRATION LAWS COMMITTEE

ALOIS W. GRAF, Chairman

The Registration Laws Committee's activities are to deal with matters affecting registration laws. Thus any proposed laws affecting the Professional Engineering Act, the Structural Engineering Act, the Architectural Act, the Land-Surveyors Act are primarily the concern of this committee. Whenever changes in other acts, such as the Plumbers Act, Mines and Materials Act establishing a Director, or other acts affect the status of the registered professional engineer, are proposed, this committee acts to safeguard the status of the engineer.

The committee has under consideration the introduction in the next legislature of bills to insert in each of the various registration acts, a provision to provide injunctive relief wherever practice is carried on in violation of the particular act. The Department of Registration and Education favors such injunctive relief provisions to curb those violators who pay their nominal fine and proceed to continue their illegal practice.

The committee also watches court actions and decisions, and amendments to the engineering laws in other states to determine whether changes might be desirable in our laws to safeguard our rights. In the last legisla-

ture antiquated provisions were eliminated and provision made for Engineer-in-Training in the Professional Engineering Act.

#### I. S. P. E. TAKES A HAND IN STIMULATING THE MAPPING PROGRAM IN ILLINOIS

G. H. Dell, Chairman, Committee on U.S.G.S. Mapping

The progress of the first mapping of the State (on a scale of 1:62,500, or approximately I mile to an inch) has been slow, and according to the present outlook its completion is still at least four or five years in the future. In the meantime, there is a growing demand for maps laid out on an even larger scale in a number of industrially important communities, and for revision of a great many of the earlier maps which are inaccurate or obsolete.

The official mapping of the State of Illinois is carried out by the U. S. Geological Survey and the Illinois State Geological Survey Division. The work is executed chiefly on a cooperative basis, the Federal Government appropriations matching those of the State on a dollar per dollar scale.

With a view to accelerating the mapping program, the U. S. G. S. Mapping Committee for a number of years has striven to collect data from individual engineers and engineering firms disclosing the more outstanding needs, deficiencies, and complaints regarding maps, as evidence for presentation to the Legislature through the State Geological Survey Division and through direct contacts with members of the Legislature. In addition, each chapter of I. S. P. E. is periodically requested by the committee to make contacts with legislators in support of appropriation bills or other measures favorably affecting the progress of State mapping.

While accurate, large-scale contour maps are especially needful for the planning and execution of engineering projects, they also provide essential information for a wide variety of additional uses, such as military, civic, agricultural, and educational. Therefore, in furthering the availability of such maps the Illinois Society of Professional Engineers is rendering a service not only to the engineers of the State but to the general public as well.

#### **OBITUARY**

(Prepared by W. J. ROBERTS)

Earl P. Shapland, prominent Champaign business man and member of Champaign County Chapter of the Illinois Society of Professional Engineers, died September 24 at Barnes Hospital in St. Louis.

"Coonie," as he was known to his friends, came to Champaign in 1928 from Pontiac and helped to organize the Nelsen Concrete Culvert Company. He was general manager and secretary-treasurer of the company.

In 1948 he was elected president of the Champaign County Builders League. He was active in many organizations including the Champaign Rotary Club, the Champaign Order of Moose, the Champaign Elks Lodge,

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Masonic Lodge at Saunemin and the Ancient and Accepted Order of the Scottish Rite in Bloomington.

Mr. Shapland had been ill since June when he had undergone treatment in Chicago and at the Mayo Clinic in Rochester, Minnesota.

He was buried in Saunemin where he resided as a

Mr. Shapland is survived by his wife, Lois; three brothers and one sister, his five sons and several grandchildren.

#### I BUILT A BRIDGE

By D. B. STEINMAN

I built a bridge across the tide To reach the distant shore, And there I roamed through fairer glens Than I had known before.

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I built a bridge across the vale To reach the sunny slope; With singing heart I built the span-A rainbow arch of hope.

I built a bridge across the gulf To reach my fellowman;

I found in him a kindred spark— He helped me build the span.

I built a bridge across the years To reach tranquility:

I did not know how beautiful The last of life could be.

I built a bridge across the dark To reach the unknown shore, And there I found supernal love And peace forevermore.

It was a Bright Early December Day and Lieutenant Hudner was flying a Korean combat mission alongside another plane piloted by Ensign Jesse Brown. A burst of flak



which he fought to keep the fire away from the fatally injured ensign until a rescue helicopter arrived. Today Lieutenant Hudner says:

"Maybe if America had been strong enough to discourage aggression two years ago, my friend, Jesse Brown, might be alive right now. So might thousands more of our Korea dead.

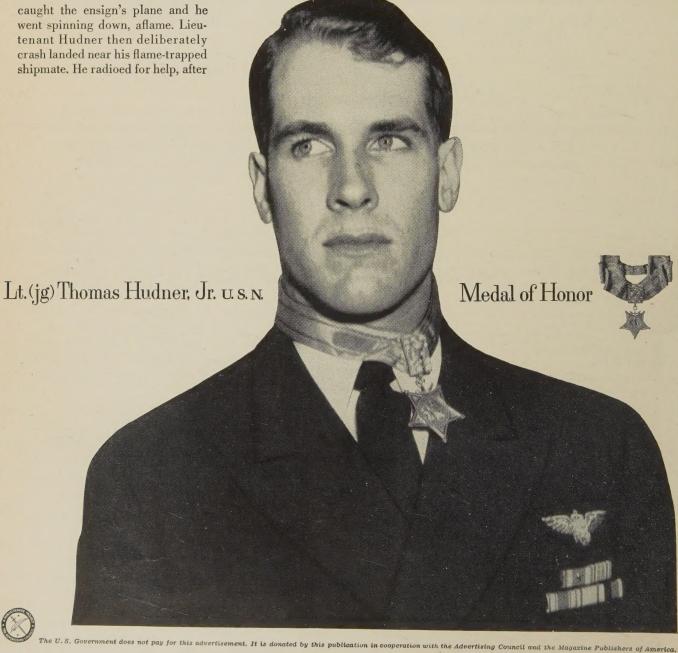
"For it's only too sadly true—today, in our world, weakness invites attack. And peace is only for the strong.

"Our present armed forces are strong—and growing stronger. But

don't turn back the clock! Do your part toward keeping America's guard up by buying more . . . and more . . . and more United States Defense Bonds now! Back us up. And together we'll build the strong peace that all Americans desire!"

Remember that when you're buying bonds for defense, you're also building a personal reserve of savings. Remember, too, that if you don't save regularly, you generally don't save at all. So sign up today in the Payroll Savings Plan or the Bond-A-Month Plan. Buy United States Defense Bonds now!

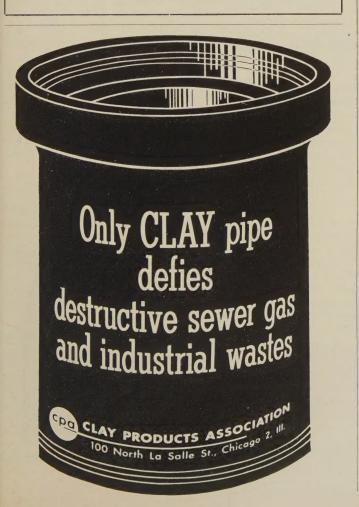
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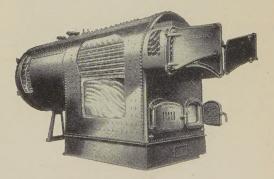
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These items are from information furnished by the Engineering Societies Personnel Service, Inc., Chicago. This SERVICE is operated on a co-operative non-profit basis by the Illinois Society of Professional Engineers, and the national societies of Civil, Electrical, Mechanical and Mining and Metallurgical Engineers. Apply to ESPS, Chicago and the key number indicated. Prepared ENGINEERS AVAILABLE advertisements limited to 40 words, with typed resumé attached may be submitted to ESPS, Chicago by members of the Illinois Society of Professional Engineers at no charge.

If placed in a position as a result of an Engineers Available or Position Available advertisement, applicants agree to pay the established placement fee. These rates are available on request and are sufficient to maintain an effective non-profit personnel service. A weekly but

letin of positions open is available to subscribers. Apply E.S.P.S., Chicago.

#### OVER THE MANAGER'S DESK

Thanksgiving is here again and everyone is dreaming about their Thanksgiving dinner with Turkey, Cranberry Sauce and all the trimmings.

EMPLOYERS: Why don't you list your order with us for the engineer that is needed in your organization? Then you can really relax and enjoy your Thanksgiving dinner without worrying about that open position that has to be filled.

ENGINEERS: Now is the time for you to list your qualifications with us and let us go to work and find the position that you have been dreaming about. Won't you come in and see us soon?

We wish all of you a very Happy Thanksgiving, knowing that all of us have something to be thankful for. J. H.

#### MEN AVAILABLE

Constr. Supt. 46. Nine yrs. supervise constr. industrial and commercial buildings. Three yrs. inspection, estimating cost of work, supervising work, repairing concrete structures. Four yrs. methods of repair for mistakes of faulty cast. of aircraft. \$7000. Midwest. 727-PE

Designer. 27. Five yrs. superv. drafting and check drawing for power or sub-station wiring. Nineteen mos. make drawings as needed and write misc. B/M. \$5400. Midwest. 728-PE

Constr. Supt. C.E. 49. Six yrs. supervised const. of shopping centers, churches, schools, office building, houses and oil refinery and Trans-Arabian Pipe Line. \$7800. U. S. 729-PE

Marine Arch. Naval Arch. 24. Two yrs. structural drafting for alterations or additions made to facilities for Army post. Four mos. trainee: working as crew member aboard the company's fleet of towboats. \$4000. Chicago. 730-PE

Field Engineer. C.E. 29. Twenty-eight mos. design, cost estimation and field installation supervision of underground or overhead steam distribution systems. Thirty mos. sales and maintenance instruction of power shovels and P. M. Co. products. \$6800. East. 731-PE

Asst. Plt. Mgr. M.E. 26. Eighteen mos. design of heavy equipment including original design of several mechanisms. Plant layout and supervision of installations. Five yrs. in test and development of heat transfer projects. \$5800. Midwest. 732-PE

Plant Engr. C.E. 26. Twenty-one mos. design and drafting of industrial buildings. Four mos. trainee: assistant to plant engineer supervising maintenance projects in plant. \$4500. Midwest. 733-PE

Sales Engr. E.E. 27. Three yrs, design and layout of new buildings, construction and remodeling old buildings, electrical wiring of power and light, electrical control systems for machinery and safety devices. \$4800. Chicago. 734-PE

Methods Engr. I.E. 37. Two yrs. methods engr. process and maintain routing and operation sheets, plant layout, time studies. Three yrs. take time studies and compute productions standards, analyze variances from production standards. \$6000. Chicago. 735-PE

#### POSITIONS AVAILABLE

Chemical Process Engineer. Chem. Eng. Age: up to 40. 6-8 yrs, exp. in chemical process engineering and preferably in chemical or petra-chemical industries. Duties: senior process engineer handling design and process projects. For consultant in chemical industry. Salary: \$600-\$700 per month. Employer may negotiate fee. Location: Ohio. C-1360

Non-Ferrous Metallurgist. Age: up to 50. 5 plus yrs. exp. in rolling and fabricating non-ferrous metals and/or foundry operations of non-ferrous copper alloys. Knowledge of and duties: controlling all metal operations in fabrication copper alloys. For a manufacturer of novelties. Salary: up to \$9000 per yr. Employer will negotiate fee. Location: Western Chicago suburb. C-1357(a)

Plating Chemist. Chem. Eng. Age: up to 50. 3 plus yrs. exp. in electroplating, synthetics and nitrocellulose lacquers. Duties: control of solutions for plating on copper zinc alloys, silver and other metals. For a manufacturer of novelties. Salary: \$6000-\$8000. Employer will negotiate fee. Loc.: Western Chicago suburb. C-1357(b)

Ceramic Engineer. Ceramics. 3 plus yrs. exp. in ceramics work. Knowledge of closenne enamels and stylizing. Duties: install and operating processes and production on metal and plastic products finished with transparent ceramics. For a manufacturer of novelties. Salary: \$7000-\$9000 per yr. Employer will negotiate fee. Loc.: West Chicago suburb. C-1357(c)

Sales-Trainee, M.E. Age: 25. Recent graduate or better. Knowledge of centrifugal

pumps. Duties: trainee under sales manager for administrative sales work. For a manufacturer of pumps. Salary: \$350-\$400 per month. Employer will pay fee. Location: Chicago. C-1355

Assistant Chief Engineer. Must have equivalent of E.E. Degree. Should have min. of 5 yrs. exp. in design and manufacturing of fractional horsepower motors. Sal.: \$6-7000. Company will pay expenses to Colorado for interview for desirable applicants. Location: Colorado. C-1354

Designer—Motors. Age: up to 50. 5 plus yrs. exp. in designing motors and speed reducers. Duties: designing and detailing, and manufacturing fractional h.p. motors. For a manufacturer of motors. Sal.: up to \$10,000 per yr. Employer will negotiate fee. Location: Illinois. C-1353

Draftsman — Mechanical. Some technical training. 2 plus yrs. exp. in mechanical equipment of buildings layout. Duties: all board work—drafting on heating, ventilating, plumbing and air conditioning. Salary: \$400-\$450. Loc.: Chicago. C-1352

Designing and Development. M.E. preferred. Age: 25-35. 1 plus yr. exp. in design or development. May consider recent grads. Knowl.: gears helpful. Duties: design and develop pumps, valves and gears for fire equipment and marine trade. Will also follow through on projects. For a manufacturer. Salary: up to \$6000. Employer may negotiate fee. Some traveling. Loc.: Minnesota. C-1351

Senior Design Engineer. Tech. Deg. or equiv. exp. Age: no restriction. 1 year's exp. Knowledge of electronic equipment design. Duties: design work in one of following specialties: general circuits, transmitters, receivers, computers, systems analysis, display circuits, airborne electronics, guidance systems, etc. Engineering and manufacturing electronic engineers. Salary: \$6000-\$10,000 per year. Very little traveling. Location: California. C-1350

Market Analyst. College Deg. Age: under 40. 5 yrs. exp. aircraft, automotive product development and market analysis. Knowledge of product application and marketing. Duties: analyze market possibilities for products in manufacture being developed or to be developed. For automotive and aircraft components and accessories or electronics. Salary: \$7500. Employer will negotiate fee. Travel: 25%. Location: Ohio. C-1347